ABSTRACT OF THE DISCLOSURE

A high strength copper alloy is made of a prescribed material composed of Cu and inevitable impurities as well as titanium (Ti) at 0.1 to 4 weight percent, wherein it is possible to further include at least one of Ag, Ni, Fe, Si, Sn, Mg, Zn, Cr, and P at a prescribed weight percent ranging from 0.01 to 2 in total. In a manufacturing method, the material is subjected to cold rolling, precipitation treatment, and additional cold rolling sequentially, wherein the reduction rate of the additional cold rolling is set to 3% or more, and the total reduction rate of the cold rolling and the additional cold rolling ranges from 15% to 50%, so that a ratio of yield strength versus tensile strength is set to 0.9 or more. In addition, it is possible to perform stress relaxation annealing after the additional cold rolling upon heating of the material for a prescribed time.